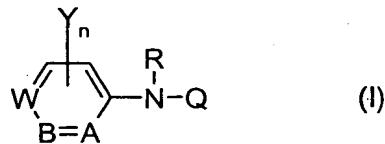


Claims:

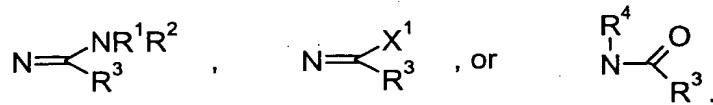
1. The use of compounds of formula I



5

wherein

Q is



10

 X^1 is chlorine, bromine, or fluorine;

15

R^1, R^2 are each independently hydrogen, $\text{C}_1\text{-C}_{10}$ -alkyl, $\text{C}_3\text{-C}_{10}$ -alkenyl, $\text{C}_3\text{-C}_{10}$ -alkynyl, or $\text{C}_3\text{-C}_{12}$ -cycloalkyl, $\text{C}_1\text{-C}_6$ -alkylamino, di($\text{C}_1\text{-C}_6$ -alkyl)-amino, $\text{C}_1\text{-C}_6$ -alkylcarbonylamino, $\text{C}_1\text{-C}_6$ -alkylsulfonyl, or $\text{C}_1\text{-C}_6$ -alkylsulfinyl, wherein the carbon atoms in these groups may be substituted with

20

1 to 3 halogen, hydroxy, nitro, cyano, amino, mercapto, $\text{C}_1\text{-C}_6$ -alkoxy, $\text{C}_1\text{-C}_6$ -haloalkoxy, $\text{C}_1\text{-C}_6$ -alkylthio, $\text{C}_1\text{-C}_6$ -haloalkylthio, $\text{C}_1\text{-C}_6$ -alkylsulfonyl, $\text{C}_1\text{-C}_6$ -alkylsulfinyl, $\text{C}_1\text{-C}_6$ -haloalkylsulfonyl, $\text{C}_1\text{-C}_6$ -haloalkylsulfinyl; or $\text{C}_3\text{-C}_6$ -cycloalkyl which may be substituted with 1 to 3 $\text{R}^{\#}$ groups, or

25

$\text{R}^{\#}$ is halogen, cyano, nitro, hydroxy, mercapto, amino, $\text{C}_1\text{-C}_6$ -alkoxy, $\text{C}_2\text{-C}_6$ -alkenyloxy, $\text{C}_2\text{-C}_6$ -alkynyloxy, $\text{C}_1\text{-C}_6$ -haloalkoxy, $\text{C}_1\text{-C}_6$ -alkylthio, or $\text{C}_1\text{-C}_6$ -haloalkylthio, $\text{C}_1\text{-C}_6$ -alkylsulfonyl, $\text{C}_1\text{-C}_6$ -alkylsulfinyl, $\text{C}_1\text{-C}_6$ -alkylamino, di($\text{C}_1\text{-C}_6$ -alkyl)-amino, $\text{C}_1\text{-C}_6$ -alkylcarbonyl, $\text{C}_1\text{-C}_6$ -alkoxycarbonyl, or di($\text{C}_1\text{-C}_6$)-alkylaminocarbonyl;

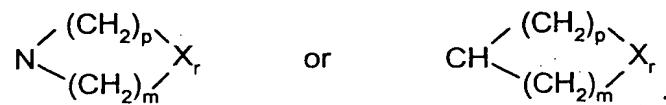
30

formyl, $\text{C}_1\text{-C}_6$ -alkylcarbonyl, $\text{C}(=\text{O})\text{NR}^{\text{a}}\text{R}^{\text{b}}$, $\text{CO}_2\text{R}^{\text{c}}$, R^{d} , R^{e} , phenyl which may be substituted with 1 to 3 $\text{R}^{\#}$ groups, or pyridyl which may be substituted with 1 to 3 $\text{R}^{\#}$ groups,

35

$\text{R}^{\text{a}}, \text{R}^{\text{b}}, \text{R}^{\text{c}}$ are each independently hydrogen or $\text{C}_1\text{-C}_4$ -alkyl which may be substituted with 1 to 3 groups $\text{R}^{\#}$;

R^{d} is $\text{NR}^{\text{i}}\text{R}^{\text{j}}$ or



5 R^i, R^j are each independently hydrogen or $\text{C}_1\text{-C}_4\text{-alkyl}$

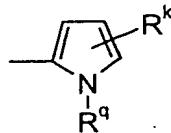
which may be substituted with 1 to 3 groups $\text{R}^{\#}$;

10 p, m are each independently 0, 1, 2, or 3, with the proviso
that p and m are not both 0.

X is oxygen, sulfur, amino, $\text{C}_1\text{-C}_4\text{-alkylamino}$, or phenyl-
amino, or, if p is 0 then X can also be phenoxy or $\text{C}_1\text{-}$

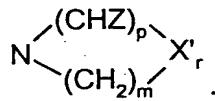
15 $\text{C}_6\text{-alkoxy};$
 r is 0 or 1;

R^e is



15 R^k, R^q are each independently hydrogen or $\text{C}_1\text{-C}_4\text{-alkyl}$
which may be substituted with 1 to 3 groups $\text{R}^{\#}$; or

20 R^1 and R^2 may be taken together to form a ring represented by the structure



25 $\text{p, m are 1, 2 or 3};$

X' is oxygen, sulfur, amino, $\text{C}_1\text{-C}_4\text{-alkylamino}$, phenylamino, or
methylene;

25 Z is $\text{C}_1\text{-C}_4\text{-alkyl}$ or phenyl;

30 R^3 is hydrogen, $\text{C}_1\text{-C}_{10}\text{-alkyl}$, $\text{C}_2\text{-C}_{10}\text{-alkenyl}$, $\text{C}_2\text{-C}_{10}\text{-alkynyl}$, $\text{C}_3\text{-C}_{12}\text{-}$
cycloalkyl, wherein the carbon atoms in these groups may be partially
or fully halogenated or substituted with

30 1 to 3 cyano, nitro, hydroxy, mercapto, amino, $\text{C}_1\text{-C}_6\text{-alkyl}$, $\text{C}_3\text{-C}_6\text{-}$
cycloalkyl, $\text{C}_1\text{-C}_6\text{-alkoxy}$, $\text{C}_1\text{-C}_6\text{-alkylamino}$, di($\text{C}_1\text{-C}_6\text{-alkyl}$)-amino,
 $\text{C}_1\text{-C}_6\text{-alkylthio}$, $\text{C}_1\text{-C}_6\text{-alkylsulfonyl}$, or $\text{C}_1\text{-C}_6\text{-alkylsulfinyl}$ groups,
wherein the carbon atoms in these groups may be substituted by

35 1 to 3 halogen atoms, a 5- to 6-membered aromatic ring sys-
tem which may contain 1 to 4 heteroatoms selected from

oxygen, sulfur and nitrogen and which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C₁-C₆-alkyl, C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyl, C₁-C₆-alkylsulfinyl, C₁-C₆-alkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms, or

5

phenoxy, which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C₁-C₆-alkyl, C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyl, C₁-C₆-alkylsulfinyl, C₁-C₆-alkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms, or

10

a 3- to 6-membered saturated or partially unsaturated ring system which contains 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen and which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C₁-C₆-alkyl, C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyl, C₁-C₆-alkylsulfinyl, C₁-C₆-alkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms,

15

a 3- to 6-membered saturated or partially unsaturated ring system which contains 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen and which is unsubstituted or substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C₁-C₆-alkyl, C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyl, C₁-C₆-alkylsulfinyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms;

20

25

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R, R⁴ are each independently hydrogen or C₁-C₆-alkyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkylaminocarbonyl, or di(C₁-C₆-alkyl)-aminocarbonyl, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups R[#];

- A is C-R⁵ or N;
- B is C-R⁶ or N;
- W is C-R⁷ or N;

40

with the proviso that one of A, B and W is other than N;

5 R^5 , R^6 , R^7 are each independently hydrogen, halogen, nitro, cyano, amino, mercapto, hydroxy, C_1 - C_{10} -alkyl, C_2 - C_{10} -alkenyl, C_2 - C_{10} -alkynyl, C_3 - C_6 -cycloalkyl, C_1 - C_6 -alkoxy, C_1 - C_6 -alkylamino, di(C_1 - C_6 -alkyl)-amino, C_1 - C_6 -alkylthio, C_1 - C_6 -alkylsulfonyl, or C_1 - C_6 -alkylsulfinyl, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups R^8

10 a 5- to 6-membered aromatic ringsystem which may contain 1 to 4 heteroatoms selected from oxygen, sulfur and nitrogen and which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C_1 - C_6 -alkyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkylthio, C_1 - C_6 -haloalkylthio, C_1 - C_6 -alkylsulfonyl, C_1 - C_6 -alkylsulfinyl, C_1 - C_6 -haloalkylsulfonyl, C_1 - C_6 -haloalkylsulfinyl, C_1 - C_6 -alkoxy, C_1 - C_6 -haloalkoxy, mercapto, hydroxy, amino, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups R^8 ;

15 Y is hydrogen, halogen, cyano, nitro, amino, hydroxy, mercapto, C_1 - C_6 -alkyl, C_2 - C_{10} -alkenyl, C_2 - C_{10} -alkynyl, C_3 - C_6 -cycloalkyl, C_1 - C_6 -alkoxy, C_1 - C_6 -alkylamino, di(C_1 - C_6)-alkylamino, C_1 - C_6 -alkylthio, C_1 - C_6 -alkylsulfonyl, or C_1 - C_6 -alkylsulfinyl, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups R^8 ;

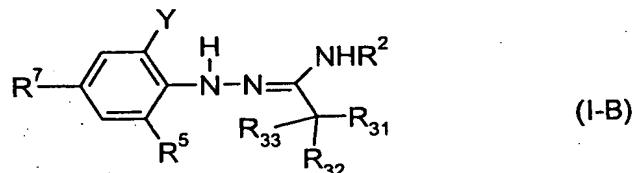
20 n is 0, 1, or 2;

25 or the enantiomers or diastereomers, veterinarilly acceptable salts or esters thereof,

 for combating parasites in and on animals.

2. The use according to claim 1 wherein the compounds of formula I are compounds of formula I-B

30



wherein

35 R^7 is chlorine or trifluoromethyl;

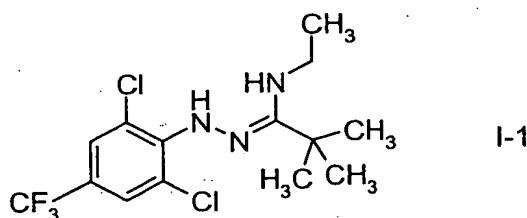
R^5 and Y are each independently chlorine or bromine;

R² is C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, or C₃-C₆-cycloalkyl which may be substituted with 1 to 3 halogen atoms, or C₂-C₄-alkyl which is substituted by C₁-C₄-alkoxy;

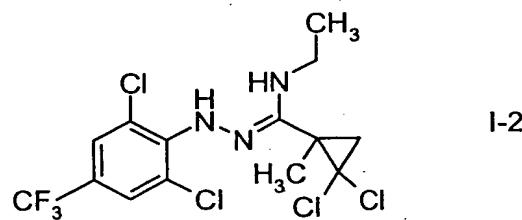
5 R³¹ and R³² are C₁-C₆-alkyl or may be taken together to form C₃-C₆-cycloalkyl which may be unsubstituted or substituted by 1 to 3 halogen atoms;

10 R³³ is hydrogen or C₁-C₆-alkyl,
or the enantiomers or veterinarilly acceptable salts thereof.

3. The use according to claims 1 or 2 wherein the compound of formula I is a compound of formula I-1.



15 4. The use according to claims 1 or 2 wherein the compound of formula I is a compound of formula I-2.



20 5. The use as claimed in claims 1 to 4 wherein the parasites are selected from the Diptera, Siphonaptera, and Ixodida orders.

6. The use as claimed in claims 1 to 5 wherein the animals are cats or dogs.

25 7. A method for treating, controlling, preventing or protecting animals against infestation or infection by parasites which comprises orally, topically or parenterally administering or applying to the animals a parasitically effective amount of a compound of formula I as defined in any one of claims 1 to 4.

30 8. The method as claimed in claim 7 wherein the parasites are selected from the Diptera, Siphonaptera, and Ixodida orders.

9. The method as claimed in claims 7 or 8 wherein the animals are cats or dogs.

10. A process for the preparation of a composition for treating, controlling, preventing or protecting animals against infestation or infection by parasites which comprises a parasitically effective amount of a compound of formula I as defined in any 5 one of claims 1 to 4.